

said communication system between preselected times of day to answer incoming calls without ringing and transmit a preselected message to the calling party and to receive and store any incoming message.

10. A self contained communication system comprising:

- a keyboard terminal housing;
 - a microprocessor located within said keyboard terminal housing;
 - a real time means coupled to said microprocessor;
 - a keyboard located on said keyboard terminal housing and having a plurality of alphanumeric data entry keys in communication with said microprocessor;
 - memory means located within said keyboard terminal housing and in communication with said microprocessor for storing a program for controlling the operation of said microprocessor;
 - random access memory means in communication with said microprocessor for temporary storage of data;
 - telephone line interface means for coupling to a phone line, said telephone line interface means being means for receiving electrical signals from and providing electrical signals to a phone line, including an off hook signal to maintain a phone line connection;
 - a telephone handset having a speaker for converting electrical signals to audio signals and a microphone for converting audio signals to electrical signals to be provided to said phone line;
 - a one line display means, mounted in said keyboard terminal housing and coupled to said microprocessor; and
 - a speech synthesizer including a speaker located within said keyboard terminal housing and in electrical communication with said microprocessor;
- whereby depression of a data entry key will enter data to said microprocessor, which data may thereafter be converted by said speech synthesizer to tones of synthesized speech and transmitted over said speech synthesizer speaker; and whereby depression of a preselected set of data entry keys will instruct said system to speak the identity of keys depressed and to also decode and speak coded incoming messages letter by letter or word by

word if the words are stored in the said memory means.

11. The communication system according to claim 10 wherein depression of a preselected set of data entry keys will instruct said speech synthesizer speaker of said communication system to emit a preselected combination of sounds at a preselected time so as to awaken the user of said communication system.

12. The communication system according to claim 10 wherein depression of a preselected set of data entry keys will instruct said system to place a telephone call to a preselected number at a preselected time and when said call is completed emit a preselected combination of sounds.

13. The self contained communication system according to claim 10 further comprising a modem coupled to said microprocessor and to said phone line, for converting electrical signals to audio signals to be carried over phone lines through a handset, and for converting audio signals from said handset to electrical signals to be provided to said microprocessor.

14. The communication system according to claim 13 wherein the data transmission rate of said interface means is selectable.

15. The communication system according to claim 13 further comprising a printer device and a means for placing data from said microprocessor into a standard format for transmission over a directed coupled line, whereby depression of a preselected set of data entry keys will direct said system to transmit data to said printer.

16. The communication system according to claim 15 and wherein depression of a preselected sequence of data entry keys will direct said communication system to emulate a data terminal for accessing a time sharing computer system.

17. The communication system according to claim 13 wherein depression of a preselected sequence of data entry keys will direct said communication system to emulate a TWX terminal.

18. The communication system according to claim 13 wherein said display means is a single line liquid crystal display and said computer program presents a menu of operational mode control options on the display for viewing by a user, the options on the menu being displayed sequentially on said display, selection of an option being made by depression of a key representative of a corresponding option on the menu.

* * * * *

50

55

60

65